

Using Photopoints in Rangeland Monitoring

Site Selection

- Select areas likely to be affected by changes in management.
 - For example, locations at intermediate distances from livestock water are most likely to be affected when changing from season-long continuous grazing to a 4 or 5-pasture deferred-rotation grazing plan. These photo-points should be located on grazable range sites that are relatively common in the management unit or pasture.
- Select sites on the basis of the desired information.
 - If you want to evaluate an entire pasture, choose a location on the range site that composes the majority of the grazable area in the management unit. These areas are called **key areas**
 - Additionally, unique sites with exceptional resource values or unusual susceptibility to damage may be monitored. These sites are called **critical areas**.
- Select representative sites
 - Sites likely to be affected by grazing, less than 1 mile (but more than 300 yards) from water. Avoid livestock and game trails, erosional features, fences, and roads. Avoid depressions or down-slope positions where additional surface flow of precipitation may occur.

Equipment

- ✓ Site Information and Photo-Point Transect Forms.
- ✓ Two 6-foot carpenter rulers, two steel rebar transect stakes, 100-foot tape, graduated staff.
- ✓ Digital Camera and Photo Information Sheet.
- ✓ GPS unit, compass
- ✓ Green T-bar steel reference posts
- ✓ 1-gallon zip-lock freezer bags

Photographs should always include an object that can be used to scale the image. Plot frames or graduated staves with known dimensions are widely used to scale photographs. Always include a graduated staff and the skyline in panorama photos for scaling and relocation.

Step 1: Establish a 100-foot transect with a permanent stake at each end. Complete Site Information Form for the site. Use the **Photo Information Sheet** in all photographs if possible.

Unit/Ranch:	Bead Mountain
Pasture:	Murphy
Transect:	#1-South
Range/Ecological Site:	Sandy
Observer:	B. Smith
Date:	09/02/2010

Display this sheet in every photograph you take.

Use flat yellow or blue paper to reduce exposure problems in the photograph.

Use a wide-tipped black marker to write on the sheet.

Then include the sheet in each photo so that a record of when and where the photo was taken is included in each photo.

Step 2: From behind the stake at the start of the transect, take a landscape photograph looking down the transect towards a relocatable bearing point.



Step 3: Using the two carpenters rulers, create a 3x3 foot square frame and lay it over the tape so it intersects it at the 5-foot and 8-foot marks.

Standing over the tape, take a photograph looking down at the framed section with the 5-foot mark in the foreground and 8-foot mark in the background.



Step 4: Repeat the previous process (using the frame) at the 50-foot to 53-foot marks and the 92-foot to 95-foot marks.



Step 5: At the 100-foot end of the transect, take a photograph looking back down the transect to the 0-foot mark.

A complete transect will include a total of 5 photos.



DO: Take photographs taken before grazing and during early morning or late afternoon, to provide the best contrast in shades and colors.

DON'T: Take photographs between 11 am and 2 pm, when visual contrasts are minimal.

Be Consistent

- Include the photo information sheet inside the frame of every picture for that site.
- Take pictures during the same stage of plant growth each time.
- Include the same skyline in repeat landscape pictures.
- Carefully relocate the photo-points each time.
- Maintain consistency in camera type and settings and associated documentation.